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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,793	08/29/2003	Yasuhiro Hayashi	242075US2	7450

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EXAMINER	
GIESY, ADAM	

ART UNIT	PAPER NUMBER
2627	

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/650,793	HAYASHI ET AL.	
	Examiner	Art Unit	
	Adam R. Giesy	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,19 and 20* is/are rejected.

7)☒ Claim(s) *6-18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Masui (US Pat. No. 6,687,206 B1).

Regarding claim 1, Masui discloses a controller for an optical disk drive comprising: a modulator configured to modulate record data to be recorded on an optical disk based on a record clock which is a reference clock for recording, and to generate modulation data and address information of the modulation data (Figure 1, element 12; see also column 14, lines 32-40); a prepit decoder configured to generate a prepit clock from a prepit signal detected from the optical disk (element 19); and a decision circuit configured to determine whether recording in accordance with a standard is performed, from a phase characteristic based on the address information and the prepit clock, and to control a frequency of the record clock (element 13; see column 13 line 67 thru column 14, line 4; see also column 14, lines 32-40).

Regarding claim 2, Masui discloses all the limitations of claim 1 as described in the claim 1 rejection above, and further that the prepit decoder comprises a prepit slicer

configured to generate the prepit clock by subjecting the prepit signal to waveform shaping (see Figures 4A and 4B).

Regarding claim 3, Masui discloses all the limitations of claim 1 as described in the claim 1 rejection above, and further that the controller comprises: a wobble PLL configured to generate a wobble clock based on a wobble signal detected from the optical disk (see column 16, lines 26-44); and a record clock generator configured to generate the record clock (Figure 1, element 22).

Regarding claim 4, Masui discloses all the limitations of claim 3 as described in the claim 3 rejection above, and further that the modulator comprises: a wobble counter configured to generate a sector synchronization signal by counting the wobble clock Figure 1, element 24); a timing controller configured to generate a timing signal in synchronization with either one of the sector synchronization signal and a reproducing synchronization signal obtained from previously recorded data on the optical disk (element 25); an encode address counter configured to generate a modulation control signal and the address information by counting the record clock when the timing signal is effective (Figure 5, element 33; and a modulation data generator configured to modulate the record data based on the modulation control signal (element 31).

Regarding claim 5, Masui discloses all the limitations of claim 4 as described in the claim 4 rejection above, and further that the wobble counter further generates a sector pulse by an interval of a sector of the optical disk (Figure 1, signal 'Sfs').

Regarding claim 19, Masui discloses a semiconductor integrated circuit comprising: a modulator integrated on a semiconductor chip and configured to modulate

a record data to be recorded on a optical disk based on a record clock that is a reference clock for recording, and to generate a modulation data and an address information of the modulation data (Figure 1, element 12; see also column 14, lines 32-40); a prepit decoder integrated on the semiconductor chip and configured to generate a prepit clock from a prepit signal detected from the optical disk (Figure 1, element 19); and a decision circuit integrated on the semiconductor chip and configured to determine whether or not recording in accordance with a standard is performed, from phase characteristic based on the address information and the prepit clock, and to control a frequency of the record clock (Figure 1, element 13; see column 13 line 67 thru column 14, line 4; see also column 14, lines 32-40).

Regarding claim 20, Masui discloses an optical disk drive comprising: a pickup configured to read light reflected from an optical disk, the reflected light generated by irradiating a laser beam on the optical disk, and to generate a prepit signal and a wobble signal (Figure 1, element 10); a controller configured to determine whether recording in accordance with an established standards is performed, from phase characteristic based on the prepit signal and the wobble signal, and to modulate record data to be recorded on the optical disk (element 13); and a signal processor configured to supply the record data to the controller (element 16).

Allowable Subject Matter

3. Claims 6-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 6 is allowable over prior art of record which does not disclose or suggest all of the limitations of claim 4, as well as the further limitation that **the decision circuit comprises: an address register configured to latch the address information in synchronization with the prepit clock; a dividing correction circuit configured to generates a dividing correction signal based on latched address information; and a dividing correction register configured to latch the dividing correction signal when the timing signal is effective.**

Claims 7-10 are objected to as being dependent upon aforementioned claim 6.

Claim 11 is allowable over prior art of record which does not disclose or suggest all of the limitations of claim 5, as well as the further limitation that **the decision circuit comprises: an address register configured to latch the address information in synchronization with the sector pulse; a dividing correction circuit configured to generates a dividing correction signal based on latched address information; and a dividing correction register configured to latch the dividing correction signal when the timing signal is effective.**

Claims 12-15 are objected to as being dependent upon aforementioned claim 11.

Claim 16 is allowable over prior art of record which does not disclose or suggest all of the limitations of claim 5, as well as the further limitation that **the decision circuit comprises: a first address register configured to latch the address information in synchronization with the prepit clock, and to generate a first latch signal; a second address register configured to latch the address information in synchronization with the sector pulse and to generate a second latch signal; a**

dividing correction circuit configured to generate a dividing correction signal based on the first and second latch signals; and a dividing correction register configured to latch the dividing correction signal when the timing signal is effective.

Claims 17 and 18 are objected to as being dependent upon aforementioned claim 16.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Shigemori (US Pat. No. 6,693,862 B1) discloses a recording system that controls the laser based on a modulator and a decision circuit.

b. Suzuki et al. (US Doc. No. 2001/0027551 A1) discloses an optical disc decoder system for transferring data onto an optical disc with a decision circuit.

c. Suzuki et al. (US Doc. No. 2001/0027508 A1) discloses an optical disc decoder system for transferring data onto an optical disc with a decision circuit.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARG 7/10/2006

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER